



Decommissioning and Abandonment Summit

Michael J. Saucier, Gulf of Mexico OCS Region

Agenda



- Idle Iron
 - Wells
 - Structures
- Pipelines
- Cost to Decommission
- Rigs to Reefs



Current Regulations



§ 250.1703 What are the general requirements for decommissioning?

When your facilities are no longer useful for operations, you must:

- (a) Remove all platforms and other facilities;

§ 250.1711 - When will BSEE order me to permanently plug a well?

BSEE will order you to permanently plug a well if that well:

- (a) Poses a hazard to safety or the environment; or
- (b) Is not useful for lease operations and is not capable of oil, gas, or sulphur production in paying quantities.

Notice to Lessees (NTL)



NTL 2010-G05 Defines “No longer useful for operations” which is used in the regulations for:

● Wells

- No production 5 years
- No plans for future operations

● Platforms

- Toppled
- Has not been used in past 5 years for operations associated with exploration, development or production of oil/gas

NTL Requirements



- Idle wells must perform one of the following within 3 years of making the idle iron list:
 - PA the well in accordance 250.1712 - .1717; or
 - TA the well in accordance 250.1721; or
 - Provide the well with downhole isolation.
Within two years of setting downhole plugs,
they must either PA/TA the well
- Idle platforms must be removed as soon as possible, but not longer than five years after it became no longer useful.

Implementation

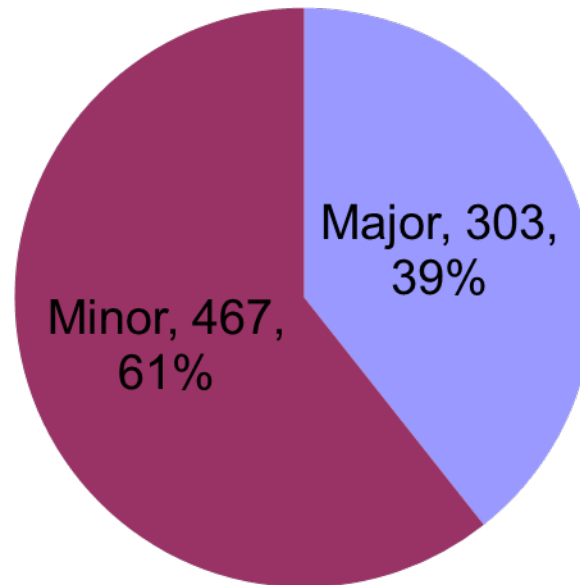


- BSEE is tracking companies' compliance with their submitted idle iron abandonment plans
- Inventory of idle iron at time of NTL issuance
 - 3233 total idle wells
 - 617 total idle platforms
- Current Inventory of idle iron (as of 2/22/2013)
 - 2016 total idle wells (including 260 newly idle since NTL)
 - 400 total idle platforms (including 62 newly idle since NTL)

Platform Removal Permits



Platform Removal Permits Approved Since 10/15/2010



- 770 total platform removal permits approved since the NTL
- Major structure – Platform containing at least 6 completions or contains more than 2 pieces of production equipment

Platform Removal Permits



| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|
| Permits Approvals | 129 | 218 | 154 | 141 | 185 | 177 | 227 | 281 | 254 | 319 | 376 |
| Platforms Removed | 111 | 159 | 190 | 122 | 108 | 153 | 151 | 226 | 212 | 260 | 254 |

Office of Structural and Technical Support



| Current Number of Structural Engineers | Vacancies |
|--|-----------|
| 5 | 7* |
| * Recruiting is ongoing | |

Permit to Modify Definitions

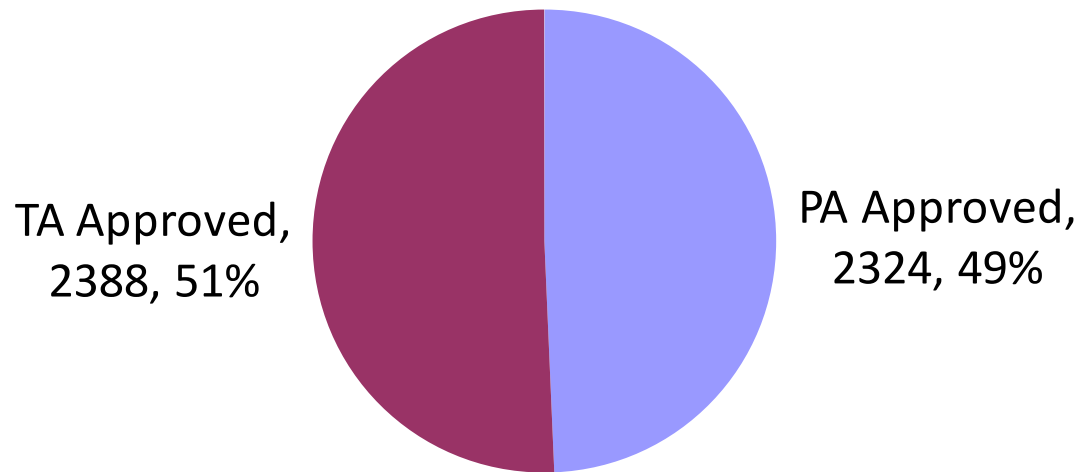


- Applications for Permit to Modify – APM
 - Plug and Abandoned
 - Temporary Abandoned
 - Initial Completion
 - Recompletion
 - Any other work not considered routine operations
- Revised Permit to Modify – RPM
 - Revise any of the above

Well Abandonment Permits



APMs Approved Since 10/15/2010

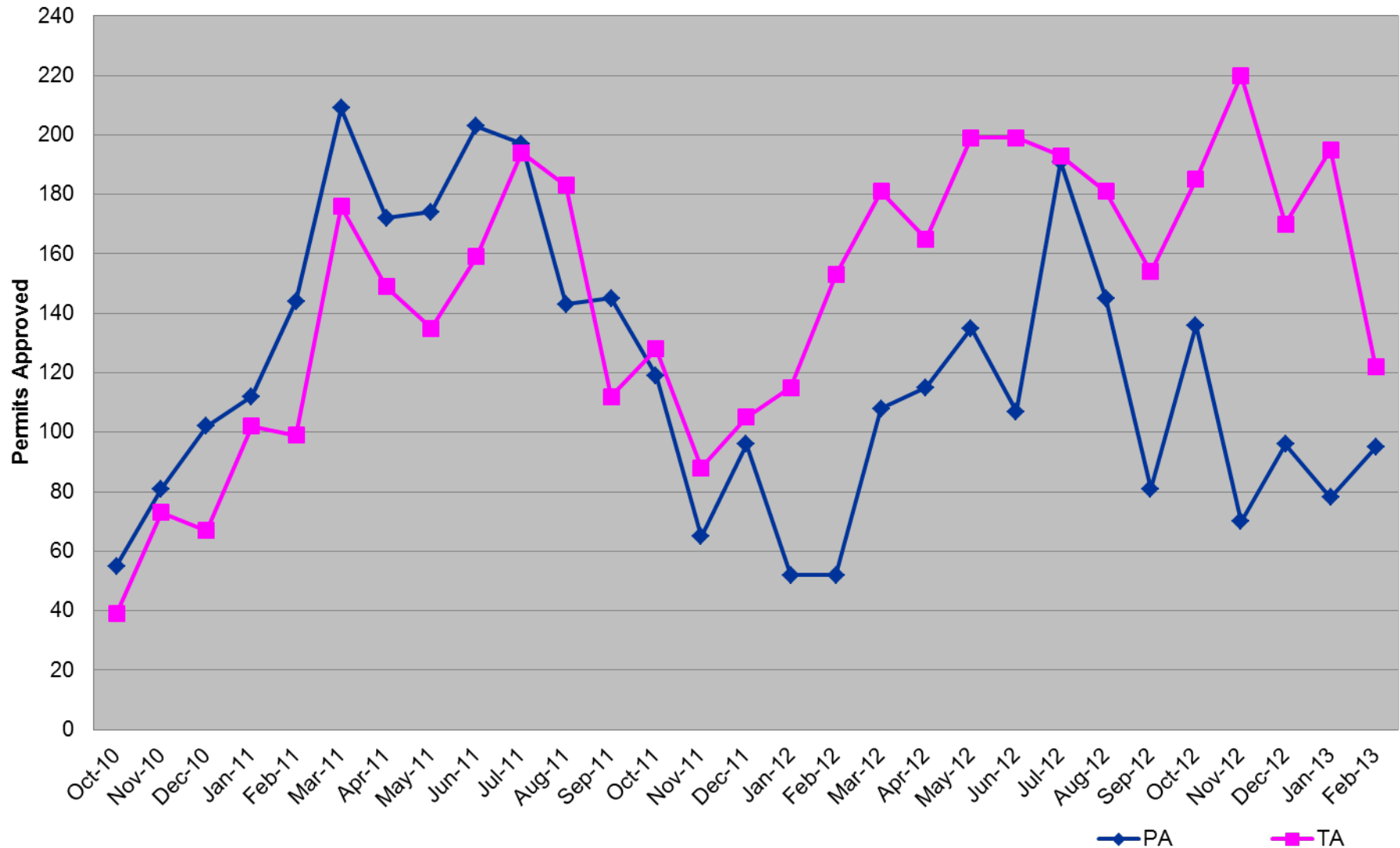


- 4712 total TA/PA permits approved since the NTL

Well Abandonment Permit



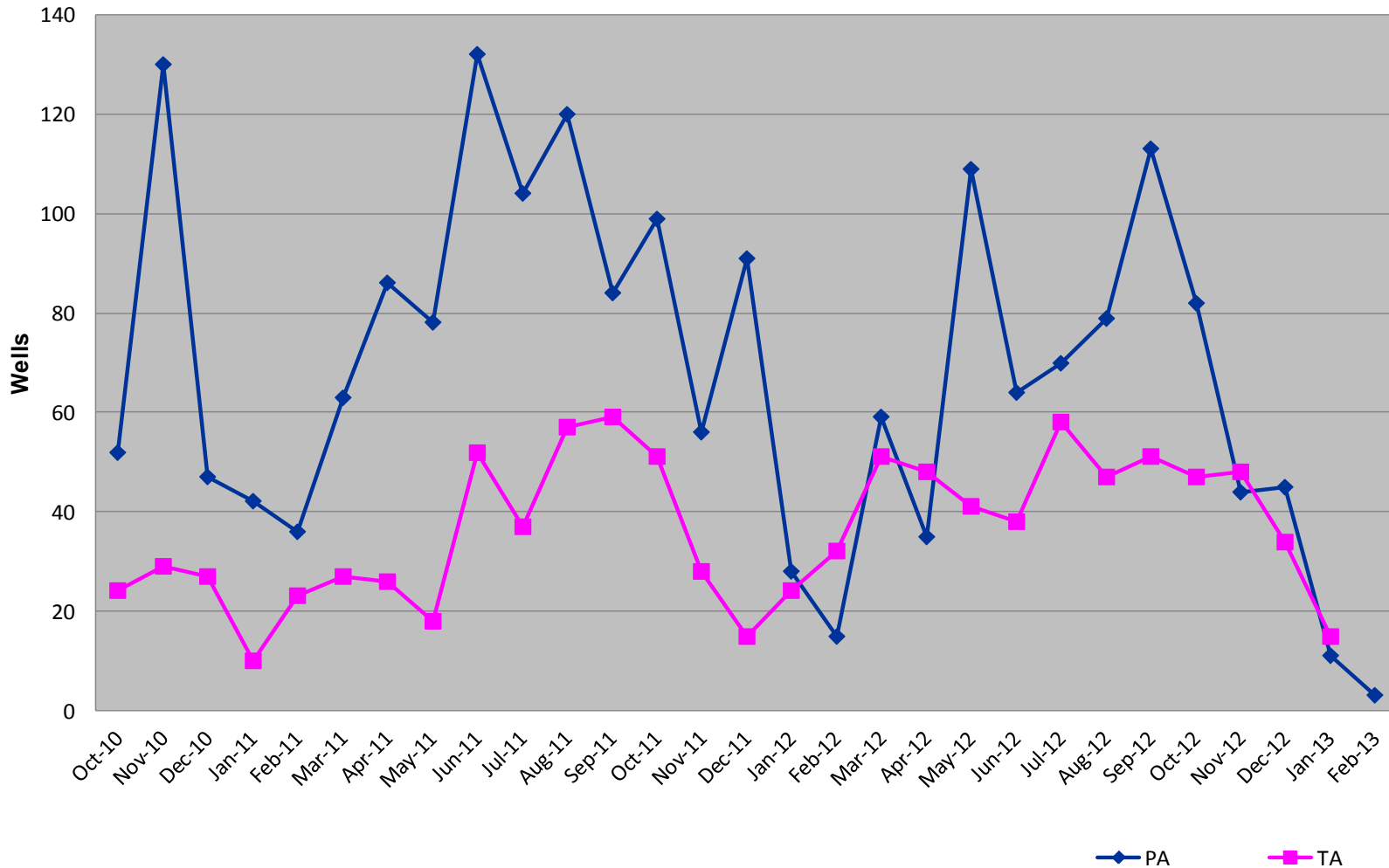
Abandonment APMs Approved



Well Abandonment Permits



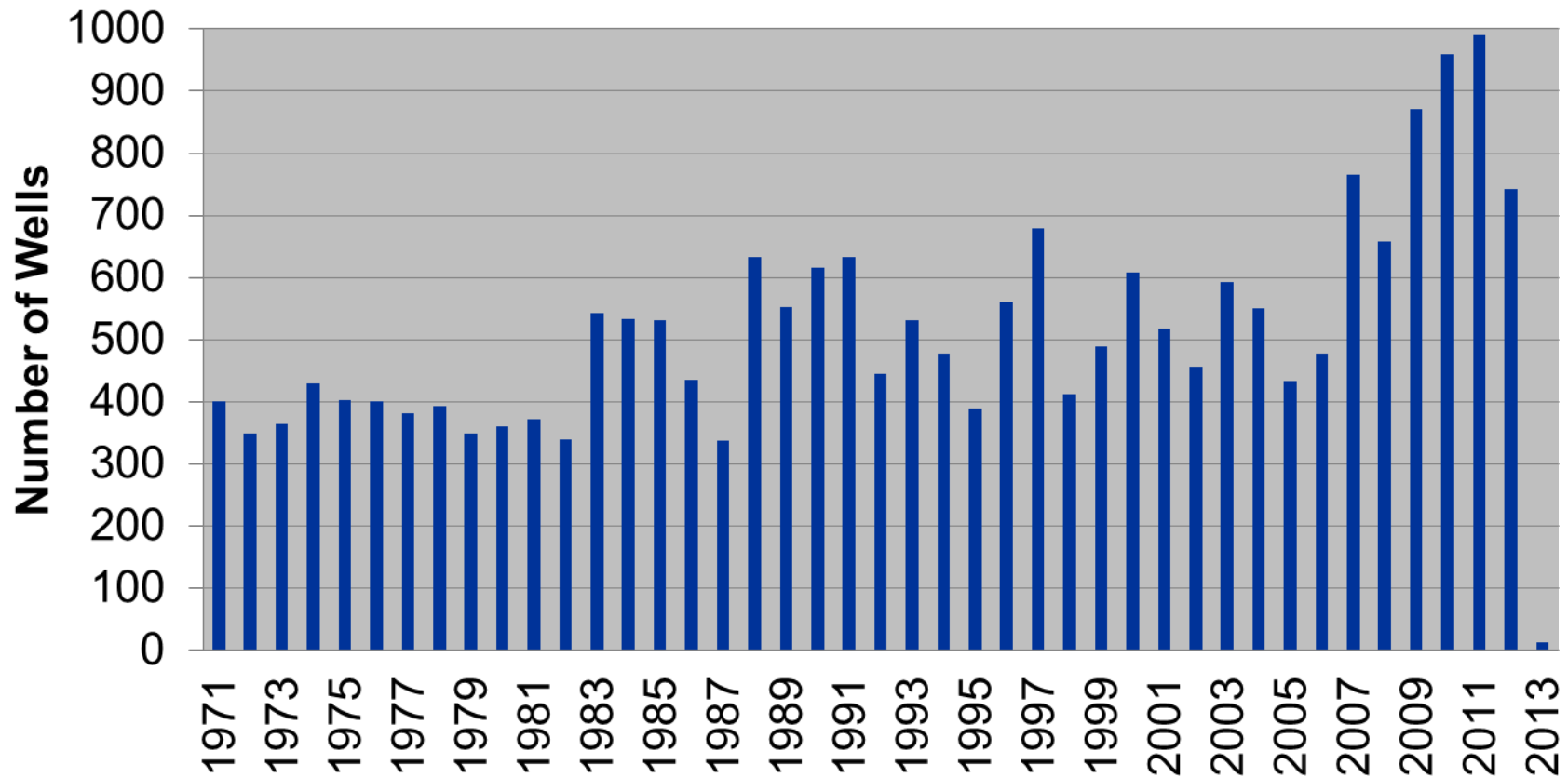
Number of Wells Abandoned



Plugged and Abandoned Wells



Total Wells PA'd



APMs and RPMs vs. Engineers



Status as of March 19, 2013 at 11:00 am

| District | Submitted | In-Review | Returned | Resubmitted | Pre-approval | Total by District | Well Ops Engineers | Vacancies |
|--------------|-----------|-----------|------------|-------------|--------------|-------------------|--------------------|-----------|
| New Orleans | 19 | 45 | 26 | 3 | 0 | 93 | 7 | 2 |
| Houma | 3 | 43 | 50 | 2 | 27 | 125 | 6 | 3 |
| Lafayette | 8 | 3 | 6 | 1 | 0 | 18 | 6 | 1 |
| Lake Charles | 19 | 1 | 15 | 3 | 0 | 38 | 5 | 1 |
| Lake Jackson | 6 | 3 | 23 | 0 | 0 | 32 | 5 | 1 |
| TOTAL | 55 | 95 | 120 | 9 | 27 | 306 | 29 | 8* |

*Recruiting is ongoing

Path Forward



- Currently there are 400 idle facilities and 2,016 idle wells that are still in the completed status
- Compliance with Idle Iron plans is being tracked by the Idle Iron Coordinator
- Weekly reviews will be conducted to ensure compliance with activity schedule in abandonment plan
- Updates to plans will be submitted annually or on an as needed basis

Pipelines



| Status | Miles |
|--------------------------|--------|
| Active | 24,126 |
| Abandoned | 12,628 |
| Proposed to be Installed | 2,409 |
| Proposed to be Abandoned | 2,264 |
| Out-of-Service | 2,425 |



Pipelines



Pipeline Permits from 01/01/10 to 03/19/13

| Permits for: | Received | Approved |
|-----------------|----------|----------|
| Installation | 369 | 546 |
| Decommissioning | 1367 | 1369 |
| Repairs | 638 | 610 |



Pipeline Section



| Current Number of Pipeline Engineers | Vacancies |
|--------------------------------------|-----------|
| 8 | 3* |
| * Recruiting is ongoing | |

Cost of Decommissioning



- BSEE maintains a database of decommissioning cost estimates for each OCS Lease which includes the following estimates:
 - structure removal
 - well abandonment
 - site clearance and verification
- These estimates are used by BOEM to determine the amount of financial assurance which may be required on a lease should no lessee have a financial waiver.

Cost of Decommissioning



- BSEE is currently updating all decommissioning costs in the Gulf of Mexico.
- Costs for fixed structures in water depths greater than 400 feet were adjusted in March 2010. Operators were notified by letter dated April 15, 2010.
- Costs for several floating facilities have been adjusted when warranted by news of imminent sales or a change in an operator's financial status.
- Well abandonment costs for subsea and dry tree wells on floating facilities have also been increased and are being applied on a point forward basis.



Cost of Decommissioning



Based on an internal review of actual subsea and dry tree well P&As in greater than 1,000 feet of water, BSEE estimates the time from start to finish as follows:

● COM to P&A

| | | |
|-------------|---------|--------------|
| Subsea Well | 25 days | \$20,560,000 |
| Dry Tree | 25 days | \$2,055,900 |

● TA to P&A

| | | |
|-------------|---------|--------------|
| Subsea Well | 16 days | \$13,250,000 |
| Dry Tree | 16 days | \$1,325,000 |

Costs use an assumed MODU spread rate.

Note: All cost estimates are available on the public information portion of BSEE and BOEM website.



The Future of Decommissioning



- BSEE will periodically update their review well abandonment operations for duration of operations and abandonment procedures.
- Costs for all floating facilities will be updated.
- Costs on remaining subsea wells will be adjusted.
- Review of shallow water decommissioning costs will be launched.

Rigs to Reefs



- The early 1980's was an active time for the development of artificial reef policy, studies, and cooperation between Federal and State counterparts.
- More than 420 platforms have been converted into artificial reefs in the Gulf of Mexico since the establishment of the Rigs-to-Reefs program.
- BSEE continues to support and encourage the reuse of decommissioned platform jackets as artificial reef material and continues to grant departures from complete removal requirements and applicable lease obligations.



Rigs to Reefs



Conditions of approval:

- The jacket becomes part of a State artificial reef program that complies with the criteria in the National Artificial Reef Plan.
- The responsible State agency acquires a permit from the U.S. Army Corps of Engineers and accepts title and liability for the reefed structure once reefing operations are completed.
- Any U.S. Coast Guard navigational requirements for the structure must be met.
- The reefing proposal complies with BSEE's engineering and environmental review standards.



Site Clearance Verification



After wells and platforms/facilities are removed from the OCS, operators must verify that their lease sites are clear of all obstructions in accordance with the Site-Clearance regulations (30CFR§250.1740-§250.1743) and guidance provided in the associated Notice to Lessees and Operators (NTL) No. 98-26.



Site Clearance Verification



- BSEE has met with most of the Site-Clearance Trawling and Survey Contractors to discuss problems with the current regulations/guidance and other issues they have with OCS verification activities;
- Bureau leads have coordinated with Federal/State agencies and other OCS user groups to understand how their activities are being impacted by debris from oil and gas operations;
- BSEE has also looked into several situations where debris was dragged outside of the minimum verification areas (and abandoned) which impacted trawling activities;
- The agency is using the information collected from its coordination and investigations to propose improvements to the site-clearance regulations and revision of the existing NTL to allow for safer and more effective verification activities.



Site Clearance Verification



In an effort to ensure that the Site-Clearance Program will be more successful in reducing conflicts-with and impacts-to other users of the OCS, BSEE is working towards improving enforcement of the timing of verification work (30CFR§250.1740) and necessary marking requirements (30CFR§250.1741(c)).



Submitted Questions



Question: BSEE requires that well heads not be opened prior to the removal contractor's arrival, please explain how this determination of the environmental impacts offsets the safety and cost impacts of not performing this work prior to the salvage contractors arrival. Has this P&A aspect of work been shifted as a responsibility to the contractor therefore a required adder to the salvage pricing and cost?

Question: For the regulators: Is there any other acceptable permanent barrier material other than cement at this time.

Question: Given the recent increase in funding for BSEE and the relaxation of salary constraints on hiring new regulators, has the rate of permit approvals increased, specifically for decommissioning projects? Are the new rules being expedited for well P&A so that idle wells can be closed prior to idle iron being removed?

Submitted Questions



Question: How long do you monitor an abandoned well to confirm it will remain safe "over geological time"? Do you carry out any confirmatory non-destructive test? Do you consider cost in defining/revising abandonment requirements?

Question: What changes has BSEE implemented in the past year to streamline the permitting process?

Question: What future changes in regulations are anticipated?

Question: What steps, if any, are being taken within the BSEE organization to effectively improve the timeliness and quality of communications between the GoM Region the respective BSEE district offices?

Submitted Questions



Question: What is BSEE's position on the continued use of explosives used in P&A operations?

Question: Does BSEE intend to create an automated permitting process for structure removals similar to eWell?

Question: What is the permit length for structural removal?

Question: While comparing 2011-2012 BSEE data for EXPIRED & TERMINATED structures, it shows PRODUCTION status structures have significantly decreased (rate down approx. 15%), and UNIT status has significantly increased by 20%. The question is: Have companies 're-applied' permit status to prove the structure 'useful' in the effort to prevent the structures from being in status of TERMINATED? Is this the reason why the number of structures that were to be decommissioned has dropped significantly from 2011 -to date?



Thank you for your
attention.

Website: www.bsee.gov